

Region 2 - West Central Montana

Bitterroot River

(Chris Clancy)

Trout populations in the Bitterroot River have been fairly stable over the past few years. However, rainbow trout populations have declined in the East Fork Bitterroot and upper Bitterroot River near Darby, most likely due to whirling disease. Westslope cutthroat populations have leveled out after increasing in number for over a decade since catch-and-release regulations took effect.

A large project to siphon two ditches under Skalkaho Creek is beginning and should be



Streambank stabilization project along the Bitterroot River in 2007

finished by April 2008. The goal of the project is to separate ditch and creek water so westslope cutthroat will not be lost into the ditches as they descend Skalkaho Creek toward the Bitterroot River.

A Ravalli County process to control the building of homes next to streams has been ongoing since mid-summer. As development continues, homes next to streams often result in riprap, vegetative clearing, and water quality issues. The goal is to pass an ordinance that maintains a buffer between homes and streams.

Upper Clark Fork

(Jason Lindstrom)

Decades of historic mining activity, as well as added land use impacts, have all played a role in limiting angling opportunities in the Upper Clark Fork River Basin. However, there is reason for optimism. The conservation tide is turning in the Upper Clark Fork, and the opportunities to do good things for fish are great. This work will take a lot of effort on behalf of many people, including local, state, and federal governments, concerned citizens, watershed groups, conservation organizations, and possibly most importantly, the cooperative efforts of numerous private landowners. Everybody who enjoys fish and wildlife will benefit from these cooperative restoration and conservation efforts.

While restoration and conservation work in the Upper Clark Fork Basin is really just getting started, there are projects already underway. One example is the ongoing cleanup of mine wastes along Silver Bow Creek near Butte. This is a large project that will ultimately have huge beneficial effects on the fisheries of the watershed. Every year, FWP monitors fish response to Silver Bow Creek restoration, and so far we have seen positive effects of the cleanup. This year, crews found trout in sections of the stream where they had previously not been documented. This is a good step in the right direction.

FWP is hopeful that current and future restoration efforts in the Upper Clark Fork Basin will help to re-establish recreational and native fishing opportunities throughout the area. While improving water quality and habitat condition in streams heavily impacted by historic mining such as Silver Bow Creek and the Clark Fork River will be a primary focus, there will also be efforts to restore and protect the tributaries that run into these streams. Tributary streams are incredibly important for fish spawning and rearing, and are the primary source of fish and water for larger downstream waters (i.e. the Clark Fork River). It is imperative that significant tributaries in the Upper Clark Fork are functional and healthy. Restoring or protecting important tributaries, will go a long way towards helping to restore the fishery of the Upper Clark Fork River once metals contamination is addressed.



Electrofishing a tributary in the Upper Clark Fork Basin.

Because relatively little fishery information exists on tributaries in the Upper Clark Fork, FWP spent much of this past summer surveying numerous basin streams from Jens to Warm Springs. The purpose of this sampling was to better understand fish distribution and general fish abundance, as well as overall riparian habitat condition in many of the basin tributaries. The results of these surveys will help guide future restoration and fisheries management in the Upper Clark Fork Basin.

Flint/Rock Creek Drainages (Brad Liermann)

Fisheries management efforts in the Flint and Rock Creek drainages focused on investigating the fish populations in the tributaries. Fish species that were present in each drainage and the condition of fish habitat were assessed. Boulder Creek and Lower Willow Creek were the two main tributaries where this work was focused in the Flint Creek drainage and the Ross Fork Rock Creek drainage was the focus in the Rock Creek drainage. Fish sampling consisted of electrofishing sites to collect information on the abundance of fish present and the species composition for each location. Additional information collected included genetic samples for bull and WCT as well as lengths and weights for all fish sampled. Fish sampling was completed at several locations in each drainage in order to accurately characterize changes in species composition and abundance throughout each drainage. Habitat surveys were completed at each survey site using a method developed by



the Natural Resource Conservation Service to assess whether habitat degradation was impacting these fish populations. This entire data collection effort is critical to fisheries management in this portion of Region 2. Currently, very little fisheries data is available for most of the tributaries in this area and the past data that is available is generally dated.

In addition to the tributary work completed, mainstem sampling was also completed in both of these drainages. Four electrofishing sections were completed in Flint Creek to assess the fish populations. Similar to many of the tributaries in this portion of Region 2, very little work had been completed in the past to assess the mainstem Flint Creek fishery. Surveys demonstrated surprisingly high densities of brown trout in several sections of Flint Creek. These surveys also helped to identify factors that may be negatively impacting the fishery of Flint Creek and will also provide baseline information that can be used to monitor the quality of the fishery into the future.

Fish sampling was also completed in mainstem Rock Creek during spring 2007. This consisted of electrofishing one section of upper Rock Creek in a reach that currently experiences high angler use but had not been sampled in the past. Traditionally, two electrofishing sections were completed in middle and lower portions of the Rock Creek drainage to monitor this blue ribbon trout fishery. While the data collected at these lower sites has proven very valuable, it was suspected that an additional section higher in the drainage would expand our ability to effectively monitor this fishery and potentially provide better abundance information for native bull and WCT. This population estimate was successfully completed in 2007 and provided some interesting results. Brown trout densities in this reach were found to be quite high (as was expected), but WCT densities were also found to be relatively high. It is expected that this section will be monitored in future years to better characterize the fishery in this reach and to also better monitor the entire Rock Creek fishery. Several electrofishing population estimates will be completed for the Rock Creek drainage in 2008.

Due to favorable late season snow conditions, Georgetown Lake and many of the other fisheries in Granite County had adequate water to provide quality fish habitat in 2007. In the past, reduced water levels in Georgetown Lake have caused significant fish kills. Due to Georgetown Lake being a relatively shallow, yet very productive lake, low dissolved oxygen levels are relatively common in the lake during winter. In years when the lake levels are drawn down significantly and ice and snow cover the lake for an extended period, low dissolved oxygen levels can occur throughout the profile of the lake (at all depths). Due to trout and kokanee requiring well oxygenated water, these conditions can cause significant fish kills. Fortunately, there was adequate water in the drainage in 2007 to provide high lake levels and reduce the risk of fish kills over the 2007/2008 winter period. Thus, high quality fishing for trout and kokanee is expected for Georgetown Lake again in 2008.

Clearwater River Drainage (Ladd Knotek)

Assessment of bull trout populations and the impacts of main stem dams

The Clearwater River Drainage is the largest tributary within the Blackfoot Watershed. This is a unique system with many high quality trout streams interspersed with a series of lakes along the main stem. The Clearwater system still supports a network of unique native fish populations (including lake-dwelling migratory bull trout), despite introduction of many non-native fish species that eat, compete, and hybridize with them. The primary challenges for FWP fisheries managers are 1) balancing the needs of disappearing native fish with anglers' desire for introduced sport fish (e.g., northern pike) and 2) protecting aquatic habitat quality in the face of imminent development pressure.

A series of studies over recent years have focused on identifying key habitats for native trout (bull trout and WCT) populations and factors that are limiting their abundance. By using radio telemetry to track adult bull trout and stream sampling (electrofishing) to identify stream nursery areas, biologists determined that migratory bull trout use three primary coldwater streams for spawning and rearing. Not surprisingly, these same key tributaries also support westslope cutthroat, high water quality, and other values typically suggested by "indicator" species such as bull trout. These drainages have been prioritized in watershed protection and enhancement efforts.



As native trout mature, they move out of the tributary streams and move among the interconnected Clearwater chain of lakes in the main stem river system. Once in the lakes, trout use plentiful food and the cooler waters at depth to mature and reach large size. Bull trout telemetry work associated with a graduate research project at the University of Montana has demonstrated the importance of connectivity within the main stem river and lake system and the problems posed by dams. In several locations,



bull trout and other native fish cannot move upstream past dams to reach spawning grounds.

The problem is complicated by the fact that some of the same structures (e.g., Emily-A and Rainy Dams) may also prevent the upstream spread of unwanted introduced fish. With the help of new information being gathered on a number of species, these problems will be addressed on a site-by-site basis to balance the needs of native fish, sport fisheries, and stream habitat protection.

Blackfoot River Restoration: The First 20 Years
(Ron Pierce)

The year 2007 marked the first twenty years of the Blackfoot River Restoration Initiative. During this time, the story of the Blackfoot has evolved from one of simple riparian restoration projects to a “ridgetop-to-ridgetop” philosophy of applied conservation. During the first two decades of this endeavor, fisheries assessments helped identify restoration priorities for >100 water bodies and a strategy that has now helped direct restoration to 50 tributaries, most of which harbor native species including WCT and bull trout. Thanks to groups like Trout Unlimited and many other river supporters, habitat restoration continues at a brisk pace. This restoration work has greatly improved fish populations in many waters of the lower basin (including lower Blackfoot River) despite a prolonged drought and the expansion of whirling disease.

With the help of private landowners, conservation groups and resource agencies, approximately 200 square miles of perpetual conservation easements on private lands are at or near completion in the Blackfoot Basin. Many of these are located along critical waters including large segments of the Blackfoot River and North fork Blackfoot River. Conservation easements are now secure on scattered blocks of former Plum Creek Timber Company lands from the junction of the Clearwater River east to the Continental Divide near Lincoln. One conservation easement, funded by native fish habitat conservation funds, will protect a 7,000-acre area along the southern rim of the Lincoln Valley. This and similar easements will emphasize not only the protection from development, but also the restoration of native fish habitat where needed. Other major fisheries improvements include the removal of Milltown Reservoir at the mouth and the clean up of the Mike Horse Mine area in the headwaters of Blackfoot River. The Milltown project will reestablish migrations of native fish at least as far as the North Fork Blackfoot River. The clean up of the Mike Horse will remove contaminated mining waste that led to the collapse of the cutthroat trout population in the headwaters of the upper Blackfoot River. Although there has been very little restoration activity in Clearwater River valley to date, recent fisheries research projects are now identifying critical habitats and conservation priorities in an area of imminent development pressure.

As we enter our third decade of restoration work, we remind ourselves that it is the anglers, sportsmen and conservation groups who support the fisheries resource that make the Blackfoot work possible. Those of you who fish the waters of the Blackfoot River helped make the first twenty-years a success. Please stay engaged, this work does not happen without your support, and there remains no shortage of restoration projects.